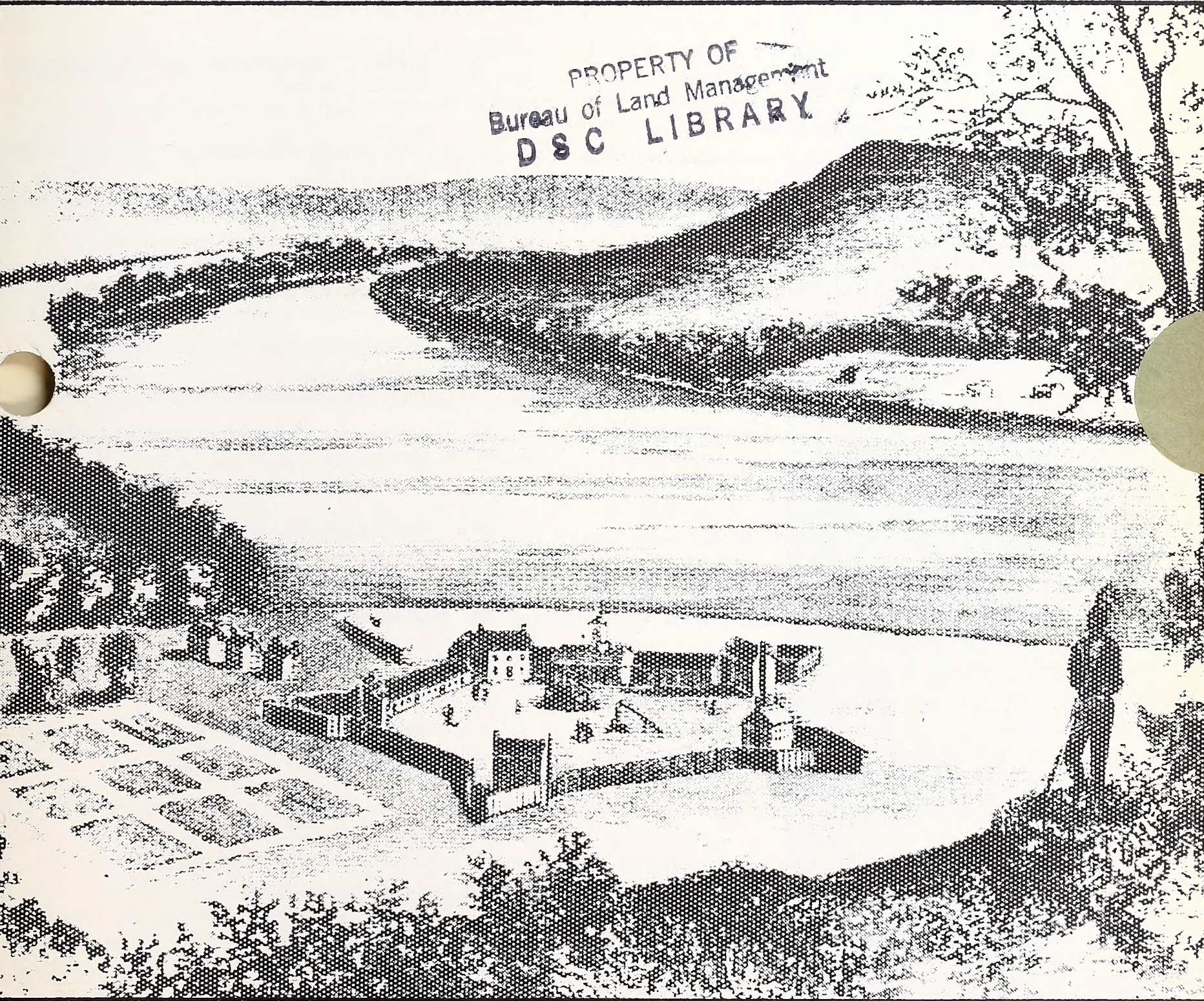


Our Public Lands

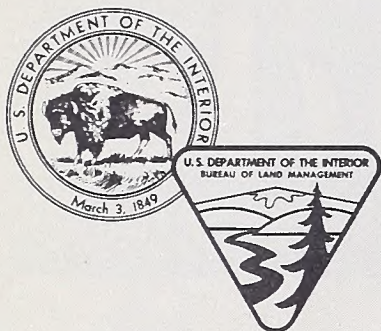
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**WERE THE EARLIEST INSTRUCTIONS
WRITTEN HERE?**

See Page 7



U.S. DEPARTMENT OF THE INTERIOR
Rogers C. B. Morton, Secretary

BUREAU OF LAND MANAGEMENT
Curt Berklund, Director

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

OUR PUBLIC LANDS, the official publication of the Bureau of Land Management, U.S. Department of the Interior, is issued in January, April, July, and October.

Jim Robinson, Editor

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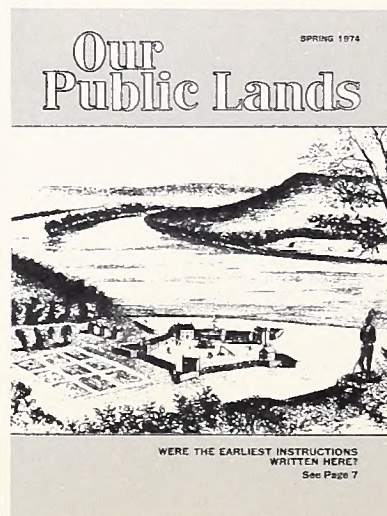
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Our Public Lands

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Ft. Harmar, at the confluence of the Muskingum and Ohio Rivers, was protector of city where earliest surveying instructions may have been written. —Ohio Historical Society Library photo

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HIGHLIGHTS

New Surveying Manual Is Published

The first new instruction manual regulating methods of surveying the public lands to be issued in 30 years has been published by the U.S. Government Printing Office for the Bureau of Land Management.

The book is entitled the "Manual of Surveying Instructions for the Survey of the Public Lands of the United States," and is considered the "Bible" of the surveying profession. The manual simplifies and updates surveying instructions relating to National Resource Lands administered by the Bureau of Land Management.

Private surveyors who deal with government surveys for reference or those who are surveying mining claims on National Resource Lands also find the book essential to their work.

Cadastral surveying, or the establishment and recording of boundary lines on Government lands, is a service that dates back in U.S. Government history to 1785.

(See "Who Wrote the Earliest Instructions?" on page 7 of this issue of OUR PUBLIC LANDS.)

The new survey manual is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, as Stock No. 2411-0037 at \$7.30.

Interior and Agriculture Increase Grazing Fees

The Departments of the Interior and Agriculture have announced that 1974 fees charged for grazing livestock on lands administered by the Bureau of Land Management and the Forest Service will be 22 and 20 cents, respectively, above the 1973 level.

The fee on public lands administered by the Bureau of Land Management in the 11 Western States will increase from 78 cents to \$1 per animal unit month (AUM). The average fee for grazing cattle on the National Forests in the six western Forest Service regions will increase from 91 cents to \$1.11 per AUM.

About 25,000 operators now hold permits for grazing

approximately 9 million head of cattle and sheep for a total of about 19 million AUM's on lands administered by the two agencies. The permits specify the location, duration, and quantity of use for each individual permit holder. Most of the grazing covered by these fees is in the 11 Western States.

The increase in BLM grazing fees will result in 40 cents per AUM going into the range improvement fund inside grazing districts. This is an increase of 11 cents per AUM over the current year.

States and Counties Share More Than \$28 Million in Public Land Payments

More than \$28 million has been distributed among 23 States and 15 counties that share in funds from Federal lands managed by the Bureau of Land Management.

The money came from mineral leasing revenue for the 6-month period that ended December 31, 1973.

In addition to the allocations to the States, BLM paid more than \$251,000 to certain Western counties under the Bankhead-Jones Act. Payment represented the counties' share of money collected during calendar year 1973 from grazing leases, mineral leases, and other user fees.

With the exception of Alaska, each State having public lands receives semi-annual payments of 37.5 percent of Federal revenue collected within that State from mineral leasing bonuses, rentals, and royalties. Alaska, under its Statehood Act as amended, receives 88.2 percent of mineral revenues.

Interior Announces New Conservation Yearbook, "In Touch With People"

The Department of the Interior has published the ninth volume of its award-winning Conservation Yearbook Series entitled "In Touch With People."

The new book portrays contributions to conservation and service to people, and is published in full color with more than 200 photographs and 60 articles.

(Continued on Page 22)

Ancient Campsite Modern Campground

The Fremont Culture discovered it first

IN A STAND of Juniper trees on west-central Utah's desert is a campground called Oasis, unique because its archeological values are being preserved at the same time that it is being managed for modern, balanced use.

Oasis is demonstrable proof that both ancient Indians and man today recognized this portion of the Natural Resource Lands as a good campground. But while the Indians of the Fremont culture developed the area without help and used it some 900 years ago, this part of the public domain is being developed today by the Bureau of Land Management for public recreational use with an eye to protecting the unique resources of the fragile desert environment and preserving its ancient values.

Oasis is in a part of BLM's Fillmore District in a location called the Little Sahara Recreation Area which encompasses some 50,000 acres of sand dunes. It is a popular attraction for off-road vehicle use, nature study, sand play, picnicking, and camping. More than 100,000 people visit the Little Sahara each year.

By **JACK PETERSON**

Natural Resource Specialist
BLM District Office, Fillmore, Utah



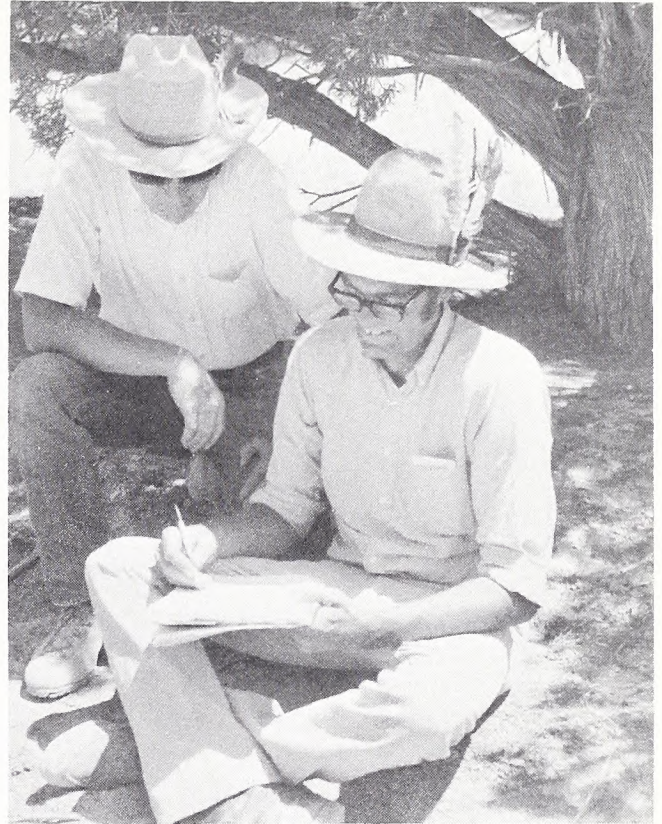
To accommodate the large number of visitors and to help protect the unique resources of the area, BLM is developing a new road, a campground (Oasis), and a picnic and sand play area.

Oasis was in the preliminary design stages during the summer of 1973 when workers discovered pottery fragments, obsidian chippings, and other indications of a possible archeological site. Work was immediately suspended and Richard Fike, archeologist in BLM's Utah State Office, was called in to evaluate the find and determine whether further development would damage possible archeological values.

Fike's investigation concluded that the site had potential to provide information about the Fremont Indians who once inhabited the area. He recommended that the site be completely excavated to salvage whatever information could be found, since further development could wipe out the remaining traces of its ancient occupants.

BLM made arrangements with Dr. Dale L. Berge of Brigham Young University to thoroughly investigate the site. Within 2 weeks, Dr. Berge's team of field archeologists were at the Little Sahara, ready to begin their study.

Their excavation and survey work identified and excavated three distinct ancient Indian sites in the Oasis Campground location. Four other sites were found in



the surrounding area. Several hundred artifacts were found, including pottery shards, projectile points, scrapers and other tools, stones used in cooking, and stone chippings and flakes—remains of primitive toolmaking. All of the artifacts were recorded and mapped as they were found, then collected and kept for future permanent reference and study.

The findings of the study indicated that the Oasis sites are indeed remnants of the Fremont Culture which emerged about 500 A.D. and disappeared about 1250 A.D. The Fremont people lived north of the Colorado River in what is now the State of Utah, and survived by hunting, gathering, and horticulture. They traded or had contacts with other peoples slightly beyond the eastern, northern, and western boundaries of Utah.

In his report on the excavation of the Oasis sites, Dr. Berge noted that the Fremont people lacked technology to control their environment, and that their environment limited the amount of technological innovations or stimulations which could be employed.

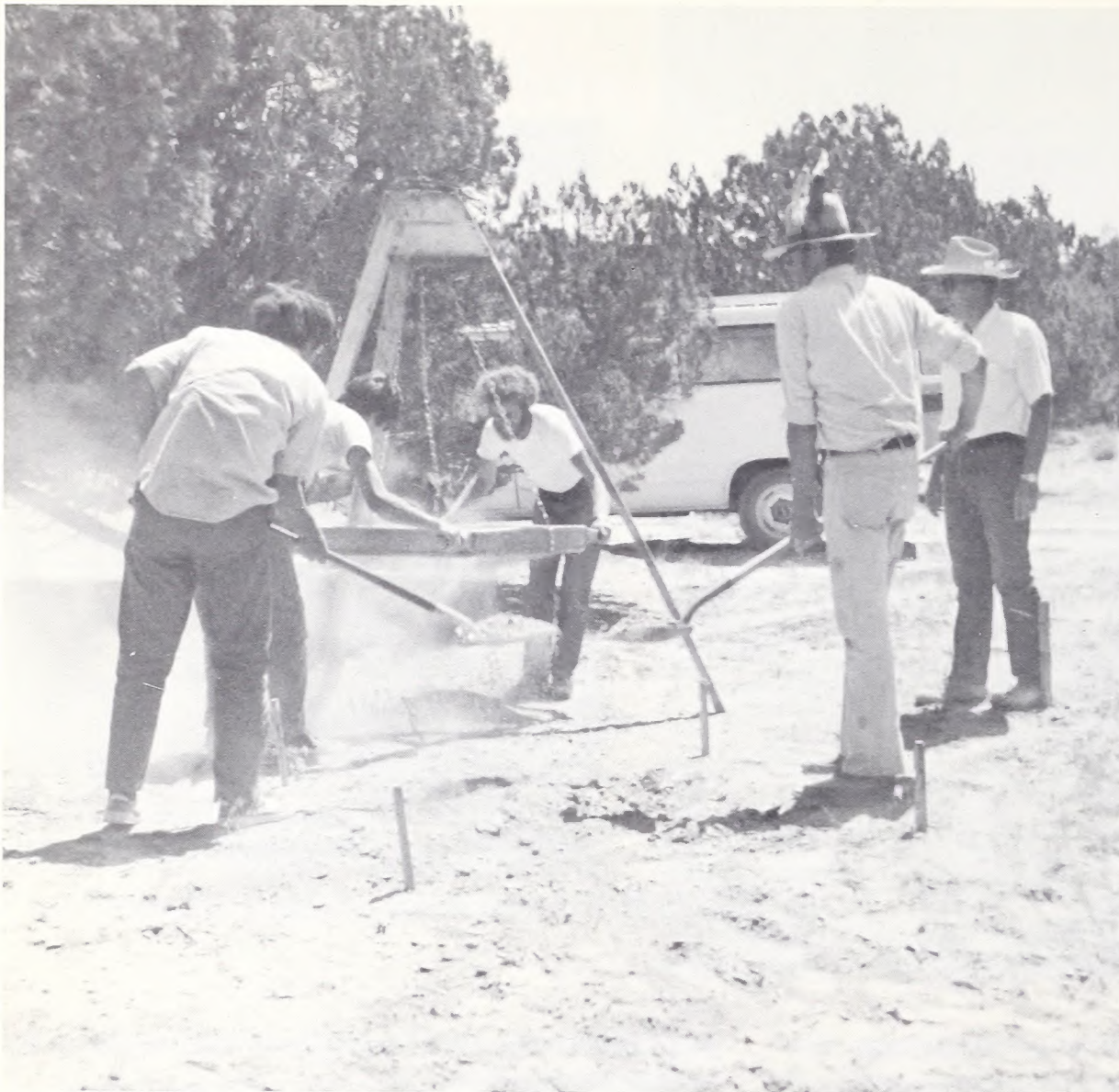
Nonetheless, the Fremont Culture had distinctive characteristics, according to the Berge report. The people lived in structures built partly underground which were called pit houses. When their harsh environment allowed, they built small villages near water and

grew corn to supplement the food they obtained by hunting and gathering.

When they traveled or when their environment did not permit permanent settlement, they camped under ledges, in caves, on the shallow slopes of ridges, or in pinyon-juniper stands. Often, concentrations of their habitation sites are found in pinyon pine forests, indicating that pine nuts were an important part of the Fremont diet.

Stone was used to make tools and projectile points for use in hunting, food preparation, and clothing manufacture. Bone implements, including needles, awls, and drills, were also used. Smooth stones collected from stream beds provided tools for grinding, for hammers and for other tools.

Artistically, the Fremont people developed distinctive traits. They chipped petroglyphs, and painted pictographs on rocks. This rock art, according to Berge, may have been created for pleasure, communication, or for religious purposes. The animals they hunted, deer or bighorn sheep, were often portrayed. Human figures of horned men, or abstract circles and mazes were common as well. The people used beads made from bone and shell to adorn themselves. Sometimes this can be seen in the rock art figures of humans.



The people who used the Oasis sites, Dr. Berge believes, probably went there to hunt bighorn sheep, antelope, or deer. They may have hunted rabbits or other small animals as well, but the large size of most of the projectile points indicates that their major interest was in the larger game animals.

No grinding stones (manos or metates) were found at the sites, perhaps because the occupants were not gathering seeds for grinding. At the present time, there are no pinyon trees in the vicinity. This was probably true in Fremont times as well, indicating that pine nuts were not the attraction which brought people there. The scarcity of tools shows that the sites were temporary and not annually reoccupied. The nearest water source is several miles away. The remains of ceramic containers which were found may have been originally used for storing and carrying water.

Dr. Berge concluded that the Oasis sites were occupied sometime around 1000 A.D. by a small Fremont band, possibly men only, for a short period of time. Over the several hundred years of the Fremont period, perhaps more than one group passed through the area. The

Oasis site was not a place which could support even a small family over a long period of time. Some of the conditions which make the sandy area attractive for modern recreation, made it a very difficult place for primitive people to prosper.

The people camped in the open among the trees. They made fires, prepared food, and manufactured tools. Some tools were used to kill animals, butcher them, and prepare them for use. The evidence found in the sites is meager in quality, compared to other more favorable locations. The exact reasons that prehistoric people used the area are not known. The fact that they did use the area, and assumptions about how they used it may answer questions about Fremont habits and movements when analyzed in the light of future discoveries.

The preservation of such cultural values on the National Resource Lands as the Oasis site yielded is an important responsibility. This responsibility is being carried out, as shown by the Oasis experience, in complete compatibility with management of other resources for modern man. □

Who Wrote the Earliest Instructions?



Mansfield's office, Ohio Company's Land Office erected in 1788, is oldest building in State.

—Ohio Historical Society Library photo

Jefferson's personal choice may have been the author

JARED MANSFIELD stretched a shirtsleeved arm across his writing table and dipped his quill pen into the ink. The already steaming room this humid August 20 morning promised a sweltering day as his pen point moved neatly across the paper:

"I am making preparations to descend the river by the 15th of the next month," he wrote to the Secretary of the Treasury.

By **TOM TILLMAN***

Cadastral Engineer
BLM, Washington, D.C.

Mr. Tillman retired last year after a Federal service career spanned the years between 1936 and 1973, all of it in cadastral surveying.

The task that faced Mansfield was formidable: Secretary Gallatin had ordered him to survey the public domain of the Federal Government in preparation for selling government land to private citizens.

He may have paused as he completed writing the sentence to look out the window and through the elm trees at the confluence of the Muskingum and Ohio Rivers a half block away, already busy with boat traffic even so early in the day.

From his office in Marietta, a bustling river town in what had become the State of Ohio, the Nation's 17th State, only 18 months ago, Mansfield was reporting to his chief, Secretary Albert Gallatin, who had recently sworn in Mansfield as the second Surveyor General of the new republic of federated States.

Marietta, settled since 1788 when the Ohio Territory was on the farthest western reach of the American frontier, now claimed a population of almost 1,000 people.

The little frontier settlement had had every reason to grow in these first 16 years of its existence, for it was the first civilian community in the Ohio Territory.

A military outpost, Ft. Harmar, had been established on the west bank of the Muskingum at its juncture with the Ohio during the French and Indian war in 1785. Just 3 years later, General Rufus Putnam, the first Surveyor General, had led ashore the vanguard of the Ohio Company of Associates, a land-buying combine organized in Boston whose purpose was to purchase for resale a large tract of public domain in the territory.

The blunt-nosed barge with its men and equipment edged into the Ft. Harmar shore about 11 a.m. in a dense fog, and next day the soldiers arranged to have the scow, its supplies and equipment, and personnel of the land-buying coterie towed to the east bank to set up headquarters.

There on a point of land between the Muskingum and the Ohio in a grove of elm trees Marietta was built (it's still called the "Elm City of America"), and the first structure that General Putnam ordered built was the Marietta Land Office.

The roller-coaster foothills of the Appalachian Mountains run down the valley of the Ohio River at this point. To the north were the as yet undiscovered coal beds. To the east lay land which was still the State of Virginia, but which on June 20, 1863, almost an exact half century later, would enter the Union as the State of West Virginia. To the northwest and west lived fierce Indians who bitterly contested the white men's invasion of their ancestral lands.

Past Marietta's front door rolled the broad Ohio waterway which was becoming the gateway to the western lands frontier. The community already was taking advantage of its location by creating a growing ship-building trade.

Mansfield's office commanded a splendid view from its position on Washington Street, a half block from the waterfront which was named, appropriately enough, Front Street.

Mansfield had chosen Marietta as his headquarters over the new national capitol, a muddy streeted community named Washington some 300 miles to the east.

The new capitol was not popular with those who served the Government. Employees had moved unhappily from Philadelphia and New York with their consoling, established social and cultural life to this raw little town on the banks of a malarial river, a town that was slow to grow or offer the benefits of civiliza-

The rectangular system established by the Ordinance of 1785 provided for laying out townships 6 miles square, to be numbered consecutively east-west and north-south from fixed references, which were generally surveyed lines but sometimes in early surveys were rivers.

At first only the exterior boundaries of the townships were surveyed, and the subdivision of townships was protracted by graphic means into sections without further survey.

Refinement of the system by succeeding laws resulted first in the ground survey of every other section line and ultimately every section line. To permit the description of land subdivisions smaller than a section, the protraction of sections into aliquot parts was begun.

The system was essentially completed by the establishment of standard parallels (horizontal lines) and guide meridians to correct for the convergency of meridians (through the polar regions) and to limit accumulated error. Between standard parallels the convergency and accumulated error in each township is thrown into the sections lying against the west and north boundaries. The other sections theoretically contain 640 acres each.

Each parcel of land has a unique description showing the aliquot part (or lot) of a specific section, township, range, and meridian, which permits the identification of one—and only one—parcel on the earth's surface.

tion which were to be found in older, more settled areas.

Money was the problem. The new Government had enormous debts and little revenue. Secretary Gallatin was charged with financing the business of the new Republic, and he followed the new Nation's first financial architect, Alexander Hamilton, in trying to sell the lands which the States had ceded to the Federal Government. (See "Birth of the Public Domain," OUR PUBLIC LANDS, Summer 1969 issue.)

Colonial America had been in the land business long before the excesses of a British Parliament and its march had caused independent New Worlders to think of severing ties with their motherland.

General Instructions to Deputy Surveyors

1st The Instruments called Rittenhouse Compass with a Needle & a common 2 pole chain of 50 links, are to be used in running & measuring your lines. You will be careful that the needle traverses well in your compass & that your chain be compared & adjusted by the stone and chain in the Office of the Surveyor General. It will be of importance that your Instruments be also occasionally examined when in the Field; & corrections or allowances be made for the variations & errors if any should be found in them.

2nd Whenever you may be prevented by insuperable Obstacles such as Swamps, Ponds, Rivers, Brooks &c from measuring by the chain on the true course of your line; the distance must be ascertained by Trigonometry, or by a traverse very accurately run & measured, untill you fall in with the true line.

3rd The Courses of all navigable rivers, which may bound or pass through your district must be accurately surveyed & their width in several places must be determined, & all those points where they may pass through the sectional or township lines which you will run. You will likewise not fail to make special notice of all streams of water which fall into the rivers with their width & course from whence they appear to come.

4th All Township & sectional lines which you may survey, are to be marked in the manner

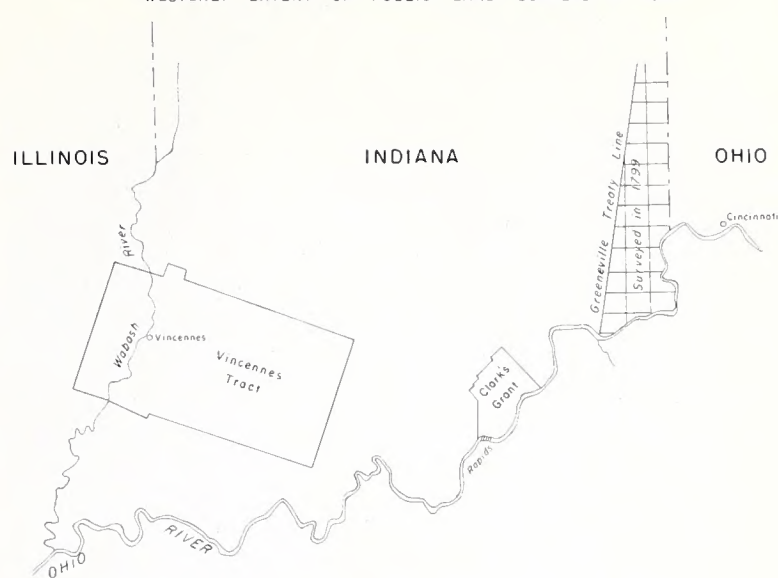
Are these the oldest instructions? Did Mansfield write them?

Colonial charters were generous in their descriptions of boundaries. "From sea to sea" read the charter of the Virginia colony at one time. Land was wealth, and the English landed gentry who settled the eastern seaboard were now men of wealth. Protecting the rights of property had been a prime concern when they wrote the basic articles of the Constitution.

How logical, then, for these same men, now the men of the new Government, to continue their practice of selling the land to raise immediate revenues, and at the same time provide a base for continuing revenues of taxation.

Perhaps the earliest act of the Confederation Congress to dispose of the public domain land was in 1784, when a committee was appointed to weigh the merits of various plans for such disposal. A young red-headed Virginian named Thomas Jefferson headed the com-

WESTERLY EXTENT OF PUBLIC LAND SURVEYS IN 1804



mittee which sifted through a century and a half of colonial precedents for the distribution of the land.

In the Ordinance of 1785, the vested rights of the U.S. Government in the mineral resources of the public lands had been reserved. However, Thomas Hutchins, the first geographer of the United States, had been diverted in his orders to survey the public domain by new and changing rules and regulations that came from a Congress beginning to understand its role and lay a legislative floor under the sale of the public domain.

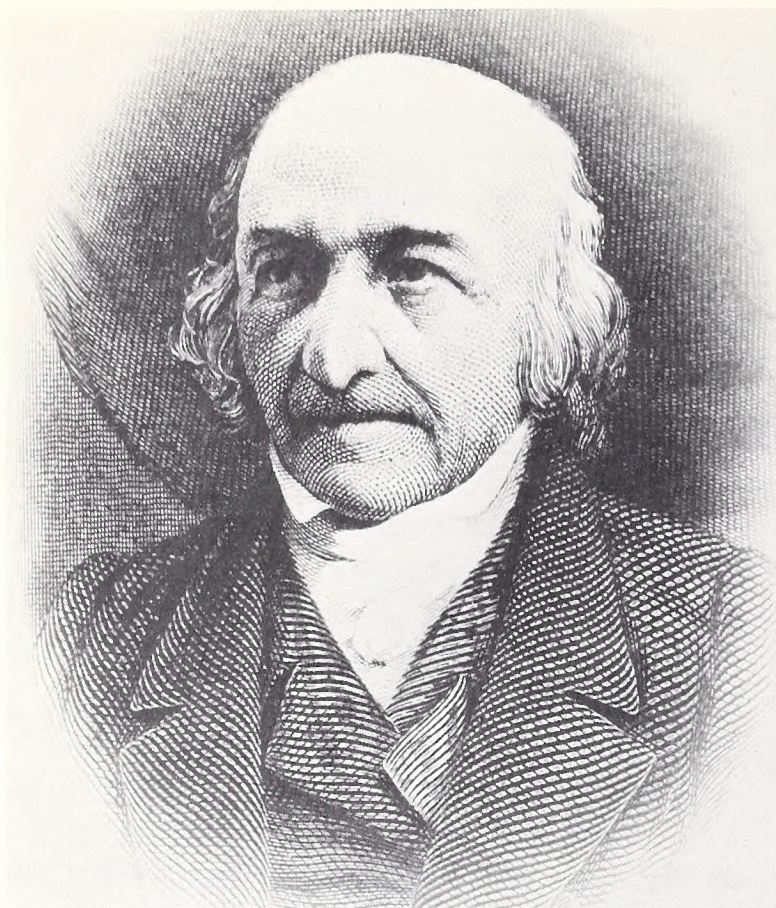
Now in 1804, Jefferson was President of the United States, a Nation which had just doubled its geographical area with the Louisiana Purchase from Spain in 1803. Lewis and Clark were preparing to leave on their historic westward exploration of the new territory. (See "Sacajawea's Papoose," OUR PUBLIC LANDS, Winter 1971.)

Secretary Gallatin had just relieved Rufus Putnam as the first Surveyor General and had issued new orders to Lt. Col. Jared Mansfield, that noted mathematician and acting professor of mathematics at the West Point Military Academy who was Jefferson's personal choice.

Perhaps the 45-year-old Mansfield toyed with his goose feather quill as the events leading to his recent appointment drifted into historical perspective—but this was not finishing his letter to his boss.

"I think it necessary for me to be at Vincennes as early as possible, in order to fix my plans for the survey of the tract about that place, and particularly to endeavor to draw a number of meridian lines, with a view to rendering the surveys correct."

Although almost all of that land now geographically identified as Indiana was still unexplored and unsettled, Vincennes in 1804 was already 102 years old, a remnant of the days of the French when their clerics established a mission on the eastern banks of the Wabash River which flowed through the beautiful wilderness.



Secretary Gallatin—photo Courtesy Department of State National Archives

The settlement was one of the locations where President Jefferson located a land office to keep pace with the westward migration of people, and the Vincennes Tract was one of Mansfield's first surveying targets.

A few weeks later, on September 11, Mansfield reported again to his chief:

"I have nearly completed the arrangements for the survey of the Vincennes Tract, and shall proceed myself for that place in a few days . . . If the executions be in conformity to my plans, the town corners will be coincident and there will, no where, be a deficiency, or excess in the sections, but, on the Western and Northern Ranges, agreeably to the law of 1800."

Mansfield's language above indicates that he had issued, in keeping with his mathematical precision, meticulous instructions to his field deputies so that the field surveys would conform to a rectangular system of surveying that was first ordered in the Ordinance of May 20, 1785, and reinforced in later legislation.

As far as history is concerned, the sole written proof of the earliest instructions to field deputies has been believed to be those issued by the third Surveyor General, Edward Tiffin, in 1815. Tiffin sent a copy of those instructions, initialed by him, to the Commissioner of the General Land Office on July 26, 1815.

Now it appears that the earliest general instructions to deputy surveyors were issued by Jared Mansfield in 1804, a full 11 years earlier. Discovering the proba-

bility that these instructions existed and had lain untouched in official files for one and three-quarter centuries has been of considerable interest to the surveying profession.

This discovery was made quite by accident. By coincidence one day I glanced at a photostatic copy of some undated, unsigned instructions to surveyors soon after I had been looking at the microfilm of original letters written by the Surveyor General of the Old Northwest Territory. The old instructions were on my mind because I had been checking the brief history of them which was to appear in the forthcoming new edition of the surveying manual.

(See "News Highlights" on page 3 and the back cover advertisement which announces publication of the newly revised Manual of Surveying Instructions.)

The writing on the photostat seemed familiar, and this fact kept pricking holes in my concentration until I finally realized where I had seen it. Because there was no use trying to do any productive work before making sure, I carried the photostat to the microfilm reader, put in the film I had most recently used, turned on the light—and there it was! The projected writing was almost exactly the same size as that on the photostat. By putting the projections directly on the photostat, letters and words could be compared, and I could see that both were written by the same hand.

The original of these undated and unsigned instructions are on file in the Michigan Historical Commission Archives, moved there as the business of surveying the public domain shifted northward into Michigan out of Ohio and Indiana. It is therefore entirely possible that instructions prepared by Jared Mansfield could be on file there.

Actual proof can only be induced from internal evidence, and by comparison with other documents known to have been written by Mansfield. However, the handwriting in the undated is not distinguishable from that used in the letters to Secretary Gallatin between 1803 and 1812 that Mansfield wrote and signed.

Of course, there does exist the faint but unlikely possibility that Mansfield's plans and instructions were not issued to the field surveyors. However, the instructions were retained for many years in the office, and the surveys made in Vincennes area appear to conform with them. Thus, the frontiers of historical knowledge appear to have been pushed back 11 years in that these may be the first written general instructions for the survey of the public lands that were issued to field surveyors. This little vignette of early American history serves to reinforce the important effect that the public lands had on the history and development of our Nation.

The 4-Wheelers Saw A Need



12-year-old Dan Flynn Jr. fell to his death down this shaft

Now the safety of other desert users is assured

FROM SKYDIVING to cave exploring, Man's adventurous nature finds expression in daring Nature's perils as he pits his strength, cunning, and resourcefulness against both known and unknown dangers.

The instinct to dare is probably as old as the cave-man ducking under the slashing claws of a sabre-toothed

tiger to vanquish a foe whose meat he didn't eat in order to win plaudits and respect for his valor.

In the California Desert, where more than 12 million acres of National Resource Lands are administered by the U.S. Department of the Interior's Bureau of Land Management, the opportunity to dare is abundantly available.

This vast public land area contains literally hundreds of abandoned but open mine shafts, often uncharted and unknown. These open mine shafts are remnants of the days when men sought to tear the wealth of Nature's mineral resources from an inhospitable, unyielding land.

By **GORDON W. FLINT**

Public Affairs Staff
BLM District Office
Riverside, California



They are dangerous remnants because they provide the opportunity for men to gamble their lives for adventure as they use the desert land for recreation. Let but two examples illustrate the point:

On a bright clear Saturday, 12-year-old Dan Flynn Jr., and his dad arrived at Red Mountain in the California Desert. Dan Sr. was a member of a motorcycle club that was sponsoring a race scheduled the next day and he was going to officiate in the race. His son, as do hundreds of other youngsters, had come along for a weekend of camping out with his father and his friends, and was looking forward to riding his own bike in the desert.

As he had been doing for more than a year, when camp was set up the youth fired up his own blue and chrome 100cc motorcycle and went out to do some fun riding near camp. He didn't come back.

The father soon became concerned when his son didn't return and started a search for the boy. The search ended that night when the youth's body was recovered from an open, abandoned mine shaft. His bike had lodged on timbers only 5 feet from the top, and the youngster had plunged more than 200 feet to his death at the bottom.

Luckier, and a survivor of a similar accident, was 20-year-old Gary Voss. Shortly after leaving his camp one Saturday morning for a ride, he tried to jump his bike over a low mound of dirt. The mound turned out to be tailings from an abandoned well hole. Gary was thrown from the cycle and fell nearly 100 feet into the shaft. He was found and rescued more than 30 hours later, but





survived his injuries. "Just plain lucky," said an official of the hospital where he was taken for treatment.

These unconnected but by no means isolated incidents are typical examples of the dangers that exist in the California desert from abandoned open shafts. Many of these date from nearly a century ago, while some of them are more recent. All are in violation of California State law for failure of the claimant to make them safe.

These open shafts have long vexed BLM officials, particularly in areas of the California desert that are used heavily for recreation.

The often asked, innocent question is, "Why not just fill them in?" It's a good question and deserves a reply: Records of mining claims are not kept in BLM offices; the claimant is required merely to record his location with the appropriate county recorder. Often the Bureau is not even aware that claims exist in remote areas. Location notices may be vague or in error, claimants move leaving no address, or transfer their holdings, or die.

Under these conditions, the legal rights of the claimant are ambiguous, and the monetary liability to the Bureau in abridging the claimant's rights is in doubt. Once the claim is determined to be on National Resource Land, however, a fence around it would seem to be the answer. And that is what is planned for these threats to life and limb as money and manpower can be budgeted.

BLM is not the only body concerned with this peril. The Bureau's concern is shared by at least one user group whose members are public-minded citizens. That group is the California Association of 4-Wheel Drive Clubs. And here is the story of their direct approach to the problem.

Early in 1973, the Vice-President for the Association's southern area, Ron Parkinson, approached BLM's Riverside District Manager, Delmar D. Vail, to say that his people wanted to work on a conservation project of some magnitude which would benefit BLM and the public. "We sure have one," Vail told him, and outlined the need for mine shaft fencing. Project "Safeshaft" was born immediately.

Roger Derry, conservation chairman for the Southern Area 4-Wheelers, spearheaded the project and began work at once with BLM's Riverside operations staff. BLM engineers drew up specifications for fencing; personnel familiar with the area drew up maps and flagged the locations. Material needs were listed, equipment requirements were tabulated, and dates were set.

The project would take 2 weekends, because the steel fence post were to be set in concrete which had to cure for at least 36 hours before fencing was strung. BLM was to furnish posts, fencing, concrete, and barbed wire to top the protective enclosures. The 4-wheelers would furnish the necessary tools and equipment, and all the labor involved.

Friday of the last weekend in April saw members of 4-wheel drive clubs from all over southern California arriving at the selected campsite just off highway 395 near Red Mountain. Roger Derry and his wife Judy, at the site early, were up until the wee hours, checking in arrivals, making up work parties, giving assignments.

Next morning, the off-roaders set to with an enthusiasm no contractor could hire. Posts and concrete were



Del Vail, BLM's Riverside District Manager, congratulates Harry S. Buschert, president of the California Association of 4-Wheel Drive Clubs, on completion of the project.

delivered, holes were dug with tools ranging from shovels and spud bars to jack hammers driven by portable air compressors which the 4-wheelers had brought along. When they ran short of wheelbarrows, the workers found old pieces of tin on which to mix the concrete. The post setting was a complete success, and the following weekend would see the job done.

True to expectations a small "camper city" sprang up again at the campsite on the first weekend in May, as 4-wheelers arrived to finish their work. Roger and Judy were again on hand, as were other officials of the Association, to see that things went smoothly. They did. By Saturday evening the project was complete.

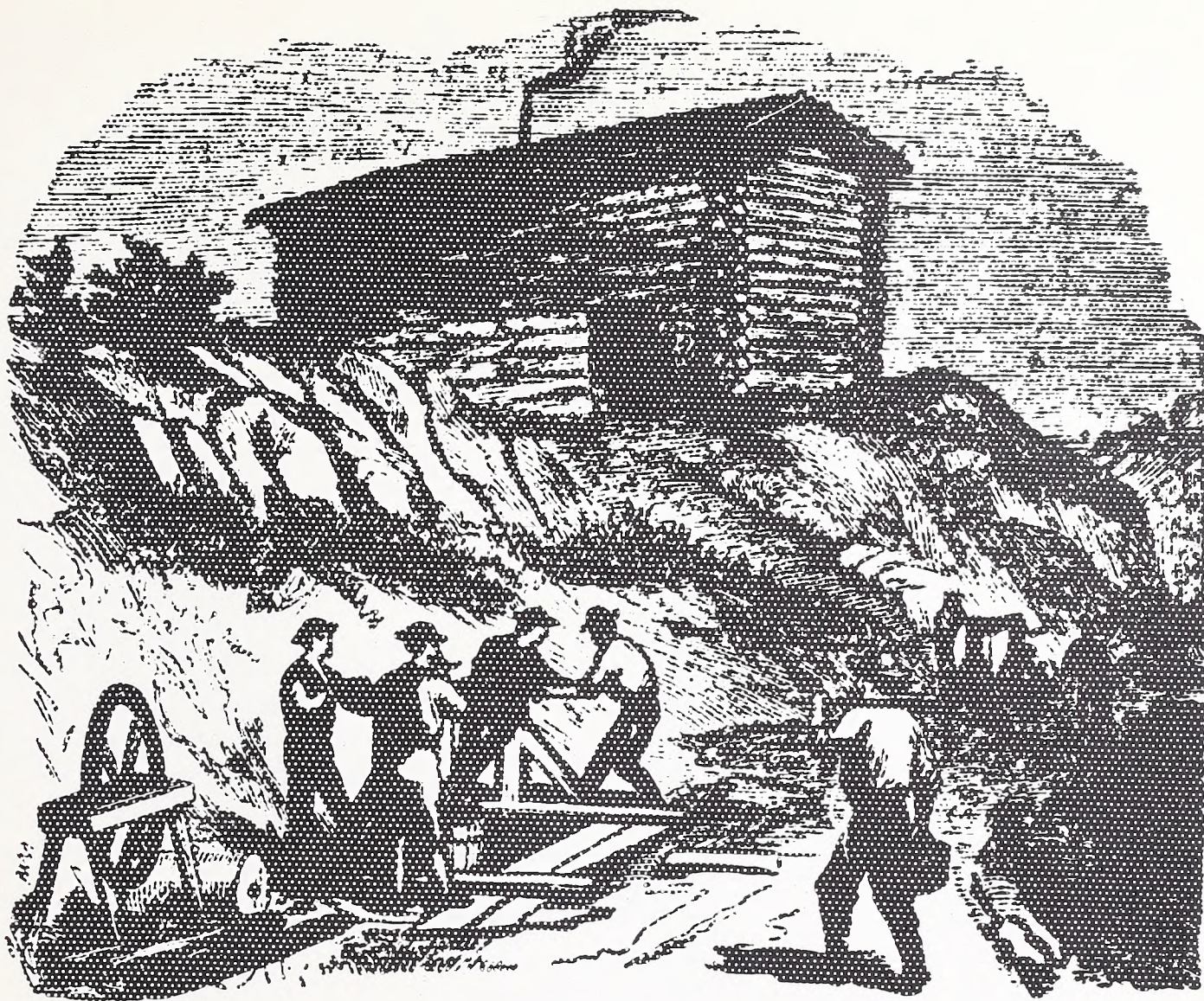
The score: 77 open shafts were fenced and made safe. The 4-wheelers had put in 741 posts, more than 7,000 feet of fencing, and nearly 11½ miles of enclosures in all, if placed end to end. Nearly 500 4-wheelers participated.

An attractive sign was placed on each of the enclosures. It carried the insignias of both the Bureau and California Association of 4WD Clubs, with a pair of clasped hands between. An appropriate finishing touch, it conveys the feeling of the fine spirit of cooperation exhibited by the 4-wheelers in this project.

Included in the 77 fenced shafts was the one which claimed young Dan Flynn's life, even though the work came too late to ease his tragic end. To the California Association of 4 Wheel Drive Clubs goes a very much deserved "Thank you! Well done!"

And while the long range work of managing the California Desert for balanced use by all groups goes on, the safety of more users is assured by the public minded attitude of one group of users. □



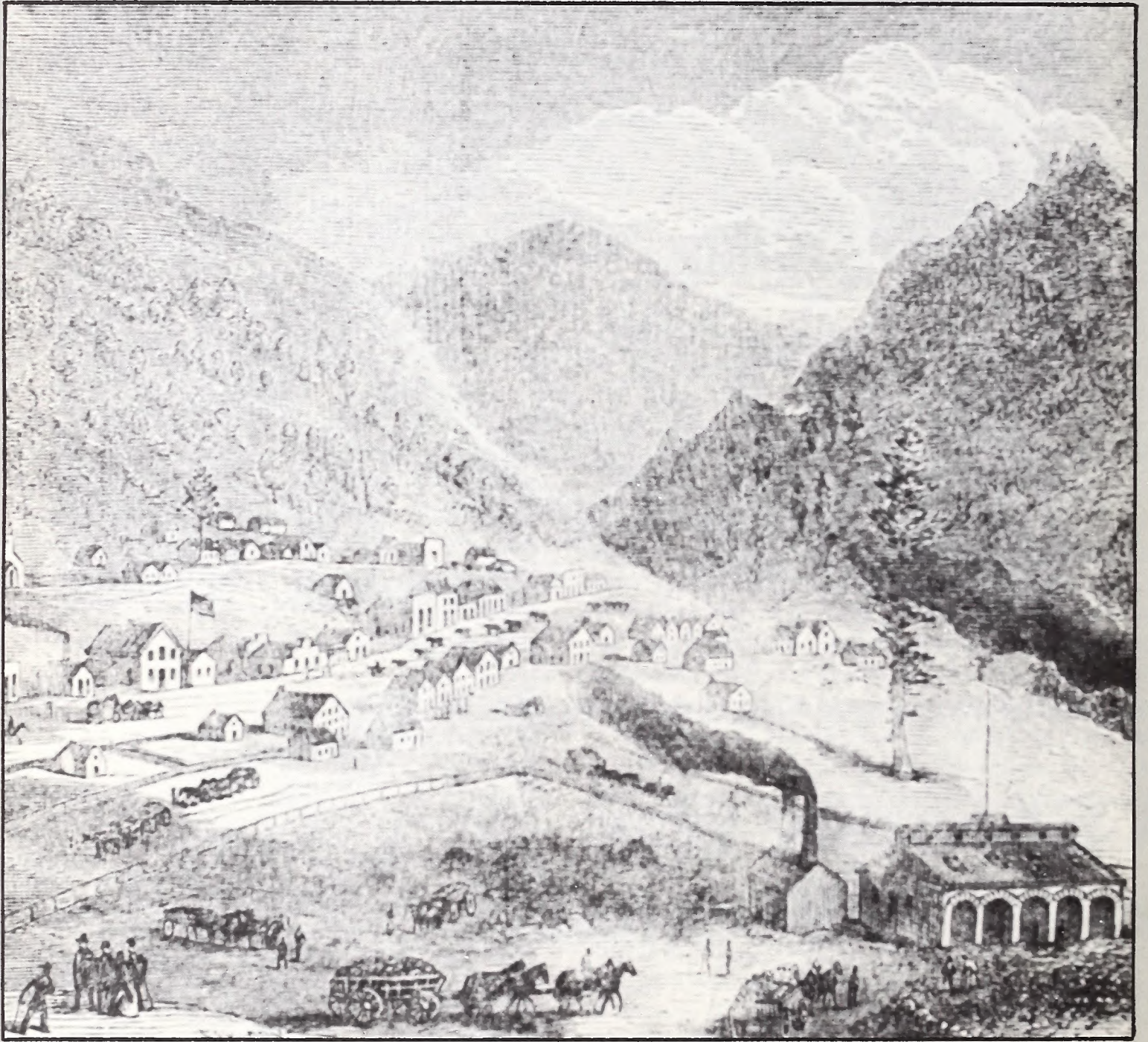


Professional mercenaries battled to the death

A Shooting War Inside A Mountain

"A western mine is a hole in the ground owned by a scoundrel who would cheat a nun on Sunday. . . ."

WHILE MARK TWAIN'S cynical observation may be somewhat overstated, it probably holds more truth than poetry. Loose regard for mining property rights caused bloody hostility in the days of the old West's boom towns. In one unique example on the public domain lands, this progressed even to the point that in 1868 two Idaho mining companies commissioned armies, built forts around the mouths of their mines,



and engaged in a murderous war a hundred feet under War Eagle Mountain.

The cry of buried treasure in the hills was to be heard for decades after the discovery of gold at Sutter's Mill in California in 1848. Men from all walks left their homes and families in search of their dreams in the rich mineral fields from the Mother Lode of California to the Klondike region of Alaska. Few regions of the West went untouched by the mad rush for riches, and Idaho was no exception.

Almost overnight the Idaho wilderness yielded to an era of lusty mining towns. When the kind of silver strike men only dreamed of was discovered in Owyhee County in 1864, the most notable or notorious of Idaho's mining towns (depending on your perspective) appeared in the heart of the strike: Silver City.

It began as no more than a campsite when the rich finds of War Eagle Mountain were discovered. But Silver City was not to be just an ordinary boomtown. Carefully planned and laid out by its promoters, the sporadically placed tents were soon supplanted by a gamut of buildings, and Silver City became a major mining metropolis.

Its mineral wealth was more than ordinarily spectacular, surpassed only by the famous Comstock Lode in Nevada. Ore from one mine assayed nearly \$5,000 to the ton, and in 1866 a mass of solid ruby-silver crystals weighing more than a quarter of a ton was entered in the Paris exposition. This entry came home with the gold medal, and then the name Silver City became an international topic of conversation.

Grubbing for riches in the rocky ground was the common lot; only a few were lucky enough to realize their dreams and win enormous wealth.

Fortunes were also accumulated in the business of providing the scores of miners with necessities and entertainment. The barrooms were unsurpassed with their impressive mirrors and polished interiors, while a local barber's specialty—baths—was advertised with an actual photograph of a bathtub. Even the hotels, which were anything from the haymow of a livery stable to an enterprising den of harlots, were more than usually interesting.

Fortunes were more often made though with illegal or at best underhanded mining claim manipulation. The selling of stocks, bonds, and "insecurities" became a lucrative business.

The final results of these "business transactions" seldom if ever crossed the dealer's mind. Long before litigation over who actually owned a particular claim came before a court, the promoter had conveniently left town, often furtively in the dead of night.

The law, of course, existed in those days, but law enforcement was rarely attributed to court rulings. Courts were, in fact, later developments of mining town society, and then only if a mining town lasted instead of fading away. Most decisions were settled with fists or guns or, when the stakes were high enough, all out war.

The stakes were just that high in a dispute between the Ida Elmore and Golden Chariot Mining Companies' boundaries in the winter of 1868. Both mines were realizing approximately \$10,000 per day when the boundary between the two properties came into question. Mercenary soldiers were hired by both sides and a log fortress was hastily built around the Ida Elmore mine.

On March 25, the heavily armed men of the Golden Chariot stormed the fortification and pushed the Ida Elmore army into its own mine. For 3 days the mine rang with the shouts of men and echoed with the sound of guns. A compromise enforced by the U.S. Cavalry finally ended the bloodiest confrontation in Idaho mining history, but not until many men lay dead or dying.

The truce succeeded in clearing the smoke from War Eagle Mountain but not the bitterness. Not long after the truce was reached, a final battle was waged in the center of town. It was not a lengthy battle—one continuous explosion lasting only seconds—and the last combatants lay dead or mortally wounded, one spilled from his chair on the hotel veranda, the other crumpled and dying in the dirt of the main street.

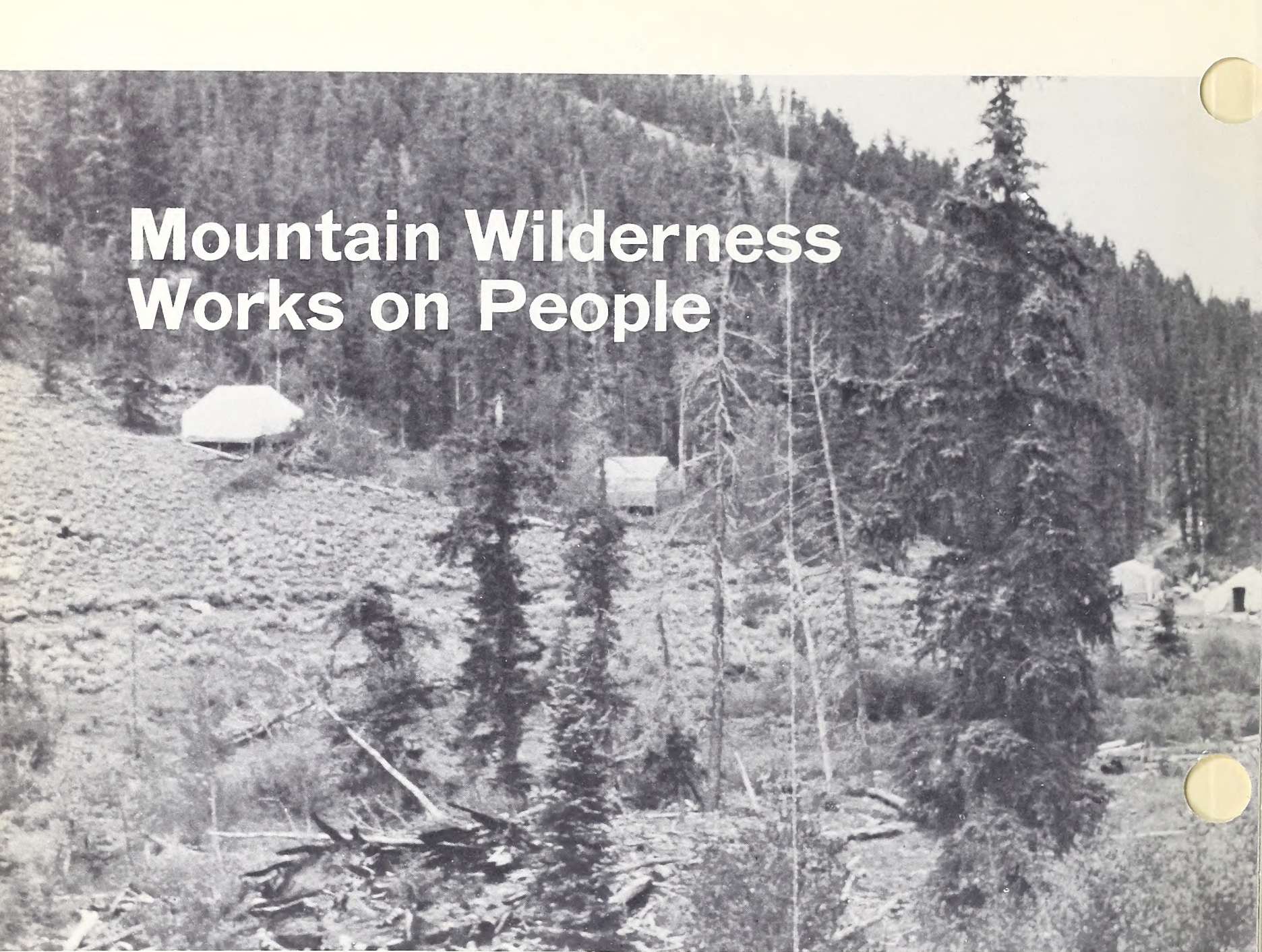
As years passed, many mines of Silver City became the property of corporations. Then in 1875 the failure of the Bank of California proved disastrous for Silver City. Properties were tied up with litigation, operations were stopped, mines filled with water, and buildings and machinery fell in ruin and decay.

The turbulent life that once was part of Silver City is gone now. As so many boom towns that grew on public domain upon foundations of dreams, there are now only a few buildings or a stone and the uneradicated loneliness of something that is dead. □

By BRIAN D. KEOGH*

Public Information Specialist
BLM, Washington, D.C.

*Mr. Keogh wrote "A Shooting War Inside a Mountain" while employed as a summer intern. He has since returned to the University of Utah to complete his studies in journalism.



Mountain Wilderness Works on People

They learned to get along with each other

IF THERE WAS any doubt that students from core-city populations couldn't make it in primitive living conditions—and do a job at the same time—20 Denver youths dispelled all qualms at the Bureau of Land Management's first primitive camp.

The group, all picked by public school officials, operated a Youth Conservation Corps camp on the Bureau's Powderhorn Primitive Area during the summer of 1973. This is what they did:

- Improved wildlife habitat by cleaning up streambeds.
- Cut and cleared a new trail into the primitive area.
- Maintained fences.
- Refurbished the Red Bridge Campground, situated outside the primitive area.

—plus collecting trash at the upper Powderhorn Lakes.

All these things were done in the 6 weeks of the primitive camp operation as a YCC project. Through the schools, the youths worked for up to 10-credit hours in environmental living, creative cooking, and journalism. But most of all, they learned how to live together.

It started on Day One, when they had to construct their base camp: build tent frames, tap springs, set up shower kits and water systems, and locate suitable spots for privies and waste disposal.

By **CONNIE WASSINK**

Information Specialist
BLM State Office, Denver, Colo.

While the base unit, Indian Creek Camp, was being built, the youths were split into three crews, and then they were rotated to the different jobs so that everyone had experience on all the tasks.

BLM personnel, the career caretakers of the land, guided the work with staff assistance from the Denver school system Balarat Center, an outdoor laboratory of the environmental education program.

The summer YCC program was a real learning experience. In building a trail from Indian Creek Camp to the Powderhorn Lakes, the youth learned patience and

attention to detail. More important, they learned to tackle an unpopular task because of a goal in sight: it had to be completed by the time the primitive area was publicly dedicated in September.

By the time the youngsters got to the job of building the Red Bridge Campground, the work was running smoothly, they were a team, and the result was a project that they were proud of upon completion.

One BLM staffer summed it up: "They became aware of getting down to business and getting some hard work done. If they are interested in learning either a trade or



helping to manage the land, they have a good idea of the work that's involved. When they walk on a trail anywhere, now they can appreciate all the hard work that has gone into building that trail."

Mountain wilderness works a special effect on people. In the case of the YCC youth, it mollified human foibles, and they learned to accept each other. The spinoff persists, and so does the camaraderie they developed from sharing difficulties encountered in working and living together in close, sometimes overcrowded tents under rough conditions. Although they are from various high schools in the Denver area, since the YCC camp experience they have traveled together into the mountains, and 10 of them recently went on a camping trip.

During the school year, there were times when they all saw each other in spite of full schedules and the difficulties in traveling around the metropolitan area.

Since the days of the Civilian Conservation Corps in the 1930s, there have not been programs like the YCC to do needed such conservation projects as the building

of a rock headwall around some culverts on Indian Creek. BLM is confident that the young YCCers can provide the dedication and the muscle power to get these jobs done.

When the team was dissolved, all the youth turned in evaluation sheets of their experience: The comments ran this way:

"I feel that the most valuable thing I have learned is how to get along better with people."

"I've learned many things about the ecology of the area, and a great deal about human nature."

"It gave me a better awareness of myself as well as the 19 other students."

"I gained valuable experience in such vastly different areas as ecology and human relations. Much of the learning was in the field of people."

"I probably learned the most through group life experiences. Of course, with a group, you can lose a lot of personal freedom, but who knows what I may have learned in losing it for awhile?" □





Myrtlewood's Uniqueness is Worth Saving

"It shall be to the Lord for a name"

SOUTHWESTERN OREGON'S mild, humid climate is hospitable to a unique broadleaf evergreen tree. It's called the Oregon myrtle, but in California people refer to it as the California laurel. Actually it's neither a myrtle nor a laurel, and there's a myth that it grows nowhere else except in the Holy Land.

The scientific name of this misnamed and misrepresented tree is *Umbellularia californica*. It has distant kinship with the laurel family (*Lauraceae*), but it cannot be related to the ornamental myrtle or the stunted myrtle of the Holy Land (*Myrtus communis*).

The Book of Isaiah in the Old Testament singles out the myrtle for special mention: ". . . and instead of the brier shall come up the myrtle tree: and it shall be to the

Lord for a name, for an everlasting sign that shall not be cut off."

Since the Biblical scribes had their troubles with the myrtle, too, it isn't the Biblical singularity that gives the Oregon myrtlewood its special attention, it's the tree's commercial value as an artisan's raw material.

Myrtlewood's extremely fine texture and grain make it tough and durable. Curing and storage of the rough sawn planks must be done under carefully controlled conditions. After many months—sometimes years—the wood is ready for conversion by master craftsmen into beautiful pieces of art and utility: small bowls, platters, cups, and various decorative as well as functional tableware.

The coloring of the wood is unique, varying from a sedate, satiny gray to riotous, multicolored grains of red, yellow, and brown. No two pieces are exactly alike. However, this coloring is found only in mature trees.

By LAWRENCE J. CASEY

Information Officer
BLM District Office, Coos Bay, Oregon



It takes a century or more for the myrtle to grow to commercial size. Some trees develop large burls which command a high price in the trade.

Myrtle is from the family of spice trees, and the dry leaf may be used for seasoning in the same manner as bay leaf. The evergreen leaves exhale a strong, camphor-like odor when crushed or bruised.

On protected bottomland sites in southwestern Oregon, particularly in Coos and Curry Counties, it is a large tree 100 to 150 feet in height and 2 to 6 feet in diameter.

The Myrtle's longevity and relatively great height (in a region which accepts giant trees as commonplace) are also a source of danger to its ultimate survival as an individual. In old age, myrtles may begin to lean, and some exhibit signs of root failure or severe butt rot.

On one public land location, the Park Creek Recreation Site which is some 35 miles southeast of Coos Bay, Bureau of Land Management officials determined that the safety of recreation visitors was being threatened by trees which were no longer safe to be around, but which could be saved with care by commercial tree surgeons.

The aesthetics of one of the area's finest myrtlewood groves was preserved by the tree surgeons, who topped and pruned or actually removed a few of the more than 70 myrtle and maple trees in the park.

BLM has long been involved in preserving virgin myrtle groves in the area. The Bureau has cooperated with the "Save the Myrtlewood League, Inc." since its formation in 1946 by public-spirited citizens, including BLM managers. Although the league was dissolved in 1964, its work done, through its efforts the choicest and most accessible myrtle groves have been preserved by large timber companies or placed in public ownership for public use and enjoyment. □

(Continued from Page 3)

While previous yearbooks have dealt with such topics as population growth, the destiny of man, and water and land, the latest publication tells of the Department of the Interior's relationships with individuals and groups of people and its performance on behalf of conservation.

The 128-page book describes how the Department's people and programs serve the public. Although it focuses on major actions or broad activities, it also deals with a few people, a regional development, or a single endangered species.

Storm Damage Is High On BLM Lands in Oregon

Storm and flood damage from early 1974 weather may exceed \$5 million on Bureau of Land Management lands in Oregon.

This estimate was based on preliminary inspections and was hampered by blocked roads, washed out bridges, and continued poor flying weather.

The principal damage involved washed-out roads and bridges and plugged culverts.

Storm damage may affect future timber sales. Contract modifications may be needed in some cases where slides and road washouts would hamper timber harvesting.

Secretary Morton Praises Endangered Species Act of 1973

Secretary of the Interior Rogers C. B. Morton has commended the passage of the Endangered Species Act of 1973 as "legislation which assures a higher degree of protection for those species of animals which are in jeopardy in the United States and around the world."

Among its provisions, the act establishes two categories of species subject to Federal protection: "threatened species" and "endangered species."

The act also creates a Federal-State partnership to conserve such species and authorizes a matching grant-in-aid program to assist States in carrying out this objective.

The Secretary said that he will make full use of the authorities provided by the legislation "in order that present and future generations of Americans may continue to enjoy the wildlife resources which are an important element in our natural heritage." □



This is a compilation of the most up-to-date information possible on up-coming sales of public lands by State Offices of the Bureau of Land Management. For details of land descriptions, prices, and other information pertinent to sales, you must write the individual State Office concerned. In most cases, there are adjoining landowners who have statutory preference rights and may wish to exercise them to buy the land. Sales notices will point out, insofar as possible, problems relating to (1) access, (2) adjoining owner preference rights, (3) small-tract sales limitation of one per customer, and other pertinent information. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Sales listed can be canceled on short notice for administrative and technical reasons. A listing of BLM State Offices with addresses is found on the opposite page.

Adjoining landowners have first rights in purchasing public land advertised for sale, and in many cases will prefer to exercise this right.

EASTERN STATES

Virtually no public domain lands in the Eastern States are available for public sale. Should any of these lands become available in the future, sale notices will be listed when the sales are scheduled. The Eastern States include all States east of North Dakota, South Dakota, Nebraska, Colorado, and New Mexico.

ALASKA

Public lands in Alaska are not available for sale at this time. Future public land sales will be announced in this space when scheduled.

CALIFORNIA

2.41 acre strip of land, identified as R 4288, about 80 by 320 feet approximately 1½ miles northeast of Cameron Corners in southeastern San Diego County. Parcel is steep and rough, rocky, and brushy. Surrounded by privately owned land. No public access. Appraised at \$920.

41.61 acre square parcel of land, identified as R 1330, at Indian Wells in Riverside County. Parcel mostly steep and rocky with about 2 acres of flatland. Surrounded by privately owned land. No public road access. Appraised at \$50,000.

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99501
District Manager

P.O. Box 1150
Fairbanks, Alaska
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ARIZONA:
Federal Bldg.,
Room 3022
Phoenix, Ariz. 85025

CALIFORNIA:
2800 Cottage Way,
Room E-2841
Sacramento, Calif.
95825

COLORADO:
1600 Broadway
Room 700
Denver, Colo. 80202

IDAHO:
Federal Bldg.,
Room 334
550 W. Fort St.
Boise, Idaho 83702

**MONTANA (N. Dak.,
S. Dak.):**
Federal Bldg.
316 North 26th St.
Billings, Mont. 59101

NEVADA:
Federal Bldg.,
300 Booth St.
Reno, Nev. 89502

NEW MEXICO (Okla.):
Federal Bldg.
P.O. Box 1449
Sante Fe, N. Mex.
87501

OREGON (Washington):
729 Northeast
Oregon St.
P.O. Box 2965
Portland, Oreg. 97208

UTAH:
Federal Bldg.
125 South State St.
P.O. Box 11505
Salt Lake City, Utah
84111

**WYOMING (Nebr.,
Kans.):**
2120 Capitol Ave.
P.O. Box 1828
Cheyenne, Wyo.
82001

ALL OTHER STATES:
Robin Bldg.
7981 Eastern Ave.
Silver Spring, Md.
20910

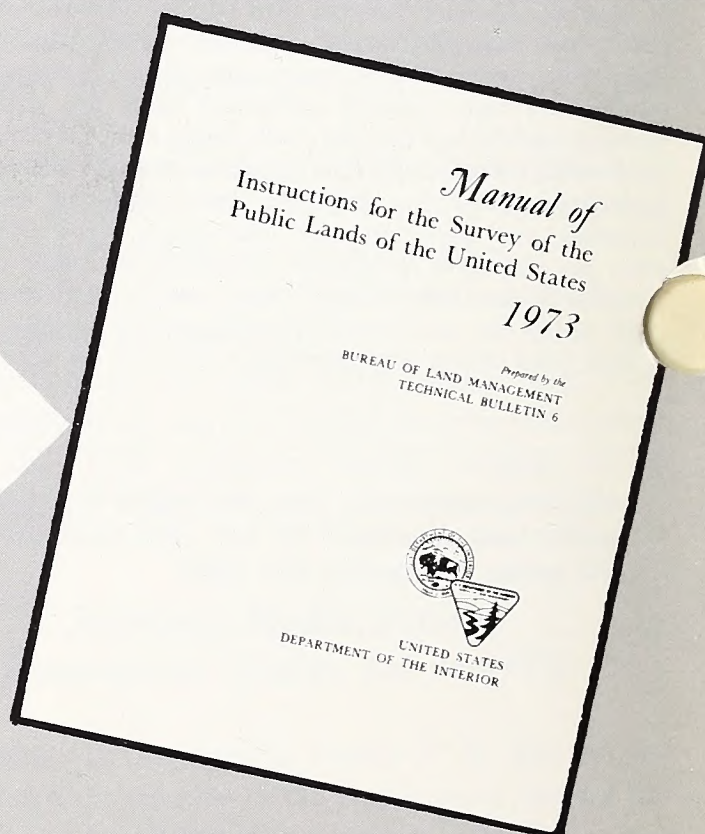
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